

**Response to Comments  
Stakeholders and Interested Parties  
10/29/04**

A summary of the comments received and the Department's response to each, is as follows:

**Comment #1:** "What happens to concentrated animal feeding operations (CAFOs) that do not apply for permit coverage as required?" October stakeholders' meetings

**Response #1:** Under the revised federal regulations, all concentrated animal feeding operations have a mandatory duty to apply for permit coverage. Any CAFO that does not apply for permit coverage by the required deadlines is in violation of the Montana Water Quality Act. Any violation of the Act is subject to civil penalties not to exceed \$25,000 per day of violation. Additionally, the Act provides for administrative penalties not to exceed \$10,000 per day of violation. When calculating penalties, the Department also assesses any economic benefit that was gained by the facility for delaying or avoiding costs to comply with the Act. Future inventories of CAFOs in Montana may be scheduled in coordination with EPA. Any un-permitted CAFO will be required to apply for permit coverage.

**Comment #2:** "How many Professional Engineers are there in the state that are qualified to design animal waste management systems?" Dillon stakeholders' meeting

**Response #2:** The Department does not have information on the number of qualified engineers in the state available to design animal waste management systems. It is expected that most environmental and agricultural engineers in the state are able to design these types of systems. Additionally, NRCS has professional engineers on staff that are available to assist producers.

**Comment #3:** "Can pre-engineered designs, such as those from MidWest Plan Service, be used in lieu of a professional engineer?" Dillon stakeholders' meeting

**Response #3:** The Department has proposed to amend the circular to say 'CAFOs must submit Plans and Specifications (P&S) prepared by an individual qualified to design animal waste management systems.' This change should allow other design professionals, such as extension specialists, and the use of pre-engineered designs to be used. The Department believes that this change is appropriate given the deadlines by which producers must comply with these rules, the uncertainty of the number of available professional engineers, and the number of other qualified design professionals and/or plans available to producers.

**Comment #4:** "Are daily visual inspections still required even when the feedlot is not operating, such as in the summer months? Miles City stakeholders' meetings

**Response #4:** If the feedlot is not operating, daily visual inspections are probably not necessary. However, regardless of whether animals are present or not, open lots still produce process-generated wastewater in the form of storm water runoff. Producers must properly operate and maintain their waste control structure at all times; discharges from

the waste control structure are not allowed except as the result of an overflow caused by precipitation events from a waste control facility that is properly designed, constructed, operated, and maintained.

**Comment #5:** “A lagoon is not the same as a waste containment structure. The statute dictating a 500-foot setback should not apply to this type of system.” Great Falls stakeholders’ meeting

**Response #5:** Waste containment structures are designed to store concentrated pollutants. Whether or not waste containment structures are considered lagoons from the viewpoint of how lagoons provide treatment, the pollution potential from animal waste and contaminated storm water runoff that has been concentrated into one area is still high and is still sewage. In order to protect ground water quality from the nutrient and bacterial contaminants present in this type of waste, it is necessary to maintain the 500-foot setback between the waste control structure and any existing water well.

**Comment #6:** “Where did the 1,000 head cutoff come from? How does this proposed rule help address water quality issues when a feedlot greater than 1,000 head of cattle far from state waters will likely cause less of a pollution problem than an operation with only 250 head of cattle located directly on or next to state waters?” Miles City stakeholders’ meeting

**Response #6:** When revising the federal regulations pertaining to concentrated animal feeding operations, EPA considered two alternative ways to defining an AFO as a CAFO. The first alternative was a ‘two-tier structure’ and the second was a ‘three-tier structure’. In the first alternative, EPA proposed that all AFOs with the equivalent of 500 animal units or more would be defined as CAFOs and would be required to obtain permit coverage. Under the three-tier structure, however, EPA decided to define all AFOs with the equivalent of 1,000 animal units or more as a CAFO, and to require permits for medium sized operations (between 300-999 animal units) only if discharges were occurring. These revised rules are based on the amount and quality of waste generated and are designed to protect water quality from both actual discharges and potential discharges of pollutants. It is important to point out that small facilities that are documented to be a significant contributor of pollutants to state waters can be designated as a CAFO, regardless of the number of animals that are confined, and be required to obtain permit coverage.

**Comment #7:** “Are there enough available workers/equipment to construct waste control structures by 2006?” Miles City stakeholders’ meeting

**Response #7:** The Department does not have information on the number of workers/equipment available to assist in constructing waste control structures. It is important to note that the Department only requires that the waste control structure be constructed in accordance with the proposed design plans. Producers are not restricted from constructing these facilities themselves.

**Comment #8:** “DEQ should address the statutory requirement that MT not adopt regulations that are not ‘more stringent than federal regulations’ unless such regulations meet specific criteria.” Steven Pilcher, Montana Stockgrowers Association

**Response #8:** The Department's legal staff is working to address this issue.

**Comment #9:** "In general these rules appear to be overkill. I don't believe you will get the average Montana feedlot operator to go thru [sic] all of the calculations you say are necessary for proper disposal of manure?" Steven Pilcher, Montana Stockgrowers Association

**Response #9:** The federal regulations require the state to adopt technical standards for nutrient management that: (1) includes a field-specific assessment for the potential for nitrogen and phosphorus transport from the field to surface waters, and; (2) addresses the form, source, amount, timing, and method of application of nutrients on each field to achieve realistic production goals, while minimizing nitrogen and phosphorus movement to surface waters. Under the revised federal regulations, large Dairy Cow, Cattle, Swine, Poultry, and Veal Calf CAFOs must develop and implement a nutrient management plan that is in compliance with the technical standards developed by the state. Assistance is available through the NRCS to develop Nutrient Management Plans.

**Comment #10:** "The circular creates some confusion as to whether it is a guideline or intended to be enforceable as a permit condition? It might be appropriate to separate mandatory requirements from recommendations." Steven Pilcher, Montana Stockgrowers Association

**Response #10:** Sections of the circular have been clearly marked as to whether it is an enforceable provision or recommendation. Additionally, the Forward to proposed Circular DEQ 9 states which terms indicate enforceable provisions and which indicate desirable procedures or methods.

**Comment #11:** "Where is the statutory authority for DEQ to require plans and specifications for CAFO control facility be submitted by a registered professional engineer?" Steven Pilcher, Montana Stockgrowers Association

**Response #11:** 75-5-402, Montana Code Annotated (MCA), states, "The Department shall: ...(2) examine plans and other information needed to determine whether a permit should be issued or suggest changes in plans as a condition to the issuance of a permit."

The revised federal regulations require the production area to be properly designed, constructed, operated and maintained to contain all manure, litter, and process wastewater including the runoff and direct precipitation from a 25-year, 24-hour storm event (or 100-year, 24-hour storm event for large swine, poultry, or veal calf operations built after April 14, 2003). To properly design an animal waste management system, site characteristics such as topography, surface type, etc. must be considered. All runoff must be directed to a waste control structure. Any of the diversion devices used to direct runoff must be adequately sized to allow peak flow rates. Additionally, the federal regulations specify that a properly designed waste control structure must address:

1. The storage period (maximum length of time before emptying the waste containment structure);
2. All waste accumulated during the storage period;
3. Normal precipitation and evaporation during the storage period;

4. Normal runoff during the storage period;
5. The direct precipitation from a 25-year, 24-hour rainfall event (or 100-year, 24-hour rainfall event);
6. The runoff from the 25-year, 24-hour rainfall event, for open lots;
7. Residual solids after liquid has been removed; and
8. Minimum treatment loading, if applicable.

Given the degree of technical knowledge necessary to properly design a waste control system, the Department will require the submittal of Plans and Specifications by an individual qualified to design an animal waste management system.

**Comment #12:** “Large swine, poultry or veal operations will be total confinement operations totally unaffected by a 100 year, 24 hour precipitation event.” Steven Pilcher, Montana Stockgrowers Association

**Response #12:** The revised federal regulations do not allow a discharge to occur from large swine, poultry, or veal calf operations designed and built after April 14, 2003. These regulations specify that a waste management and storage facility must be designed to contain all manure, litter, and process wastewater including the runoff and direct precipitation from a 100-year, 24-hour rainfall event to ensure that no discharges occur. It is important to remember that the production area of a concentrated animal feeding operation includes not only the animal confinement area, but also the manure storage area, the raw materials storage area, and the waste containment areas. Runoff from these areas must also be contained, regardless of whether the concentrated animal feeding operation is a ‘total confinement’ operation or an ‘open lot’ operation.

**Comment #13:** “The circular should be divided into two sections, one dealing with total confinement operations and one for open feeding operations.” Steven Pilcher, Montana Stockgrowers Association

**Response #13:** The revised federal regulations establish effluent limitation guidelines (ELGs) that are based on the animal type(s) present at a concentrated animal feeding operation. These ELGs apply to the entire operation regardless of whether it is a total confinement operation or an open lot operation. Therefore, to maintain consistency with the federal regulations, the circular will remain in the proposed format.

**Comment #14:** “Pg 8 – Waste treatment lagoons are not used for livestock operations in Montana.” Steven Pilcher, Montana Stockgrowers Association

**Response #14:** This is incorrect. There are both permitted and un-permitted animal feeding operations in Montana that utilize waste treatment lagoons as part of their waste management system. Regardless of whether these types of waste treatment systems exist, concentrated animal feeding operations are allowed to design and construct these types of animal waste management systems in order to comply with the revised effluent limitation guidelines. By establishing design criteria for waste treatment lagoons, the Department has simply expressed design considerations that must be accounted for when and if this type of system is installed.

**Comment #15:** “Pg 9 – What is the legal and scientific basis for limiting hydraulic loading rates to 2.0 “ per day with no consideration of soil types and geologic conditions at the disposal area? Separation and set-back distances seem quite arbitrary.” Steven Pilcher, Montana Stockgrowers Association

**Response #15:** The design criteria listed in proposed circular DEQ 9 are based on normal industry standards and are intended to define limiting values for which the Department will make an evaluation and to establish uniformity of practice. The hydraulic loading rate listed in the proposed circular comes from the NRCS Code 635 Wastewater Treatment Strip. The Department has specifically included a case-by-case deviation request from the specified design criteria in order to consider specific site conditions such as soil types and geologic conditions. The separation and setback distances listed in the proposed circular are the same as those established for municipal wastewater treatment systems in Montana and are considered necessary to protect water quality. Like municipal wastewater, animal wastes and contaminated runoff contains a number of pollutants, including bacterial and nutrient pollutants, as well as a biochemical oxygen demand. These pollutants can have harmful effects to state waters.

**Comment #16:** “Pg 13 – Manure production calculations are irrelevant when the effluent guideline is no discharge except under specified storm conditions. The calculations also fail to take into consideration normal reductions in volume that occur on the feedlot surface.” Steven Pilcher, Montana Stockgrowers Association

**Response #16:** The revised federal regulations for concentrated animal feeding operations address not only production area discharges, but also land application discharges. Manure production calculations are necessary to show the amount of waste generated at the operation can be properly disposed of through land application or alternative disposal methods. Additionally, under the revised federal regulations, concentrated animal feeding operations are required to report the estimated amount of total manure, litter, and process wastewater generated by the CAFO in both an annual report and in the permit application. The waste production table included in the circular has been provided for informational purposes only. Since it is based on as-excreted manure, it may be overly conservative in estimating the amount of manure generated at a facility. However, the Department believes it will be beneficial to provide some guidance to producers in making these calculations. The Department is not limiting producers to calculating waste production as outlined in the circular; other approaches to calculating waste production are acceptable.

**Comment #17:** “Pg 16 – The number of livestock on a site is not critical. The area contributing runoff is the controlling factor.” Steven Pilcher, Montana Stockgrowers Association

**Response #17:** The definition of a concentrated animal feeding operation is based on animal type(s) and number(s). Under the revised federal regulations, this information is required to be reported in both the permit application and an annual report. The number of livestock on site is necessary to estimate the amount of waste generated at a concentrated animal feeding operation.

**Comment #18:** “What difference does it make if manure is removed daily or once per year as long as runoff from the area is contained?” Steven Pilcher, Montana Stockgrowers Association

**Response #18:** Proper operation and maintenance of animal waste management systems is essential to ensure that a facility can meet the applicable effluent limitation guidelines. While the Department does not specify the removal frequency of manure, manure management practices can have an effect on the volume and nutrient content of the waste, as well as the volume capacity of the waste control structure(s). The nutrient management plan must demonstrate that proper operation and maintenance of the manure storage facilities is being conducted.

**Comment #19:** “DEQ can require that dead animals not be disposed of in a way that causes water pollution but nothing further. The same holds true for chemicals or other contaminants.” Steven Pilcher, Montana Stockgrowers Association

**Response #19:** The revised federal regulations specify that all concentrated animal feeding operations must develop and implement best management practices that: (1) ensure proper management of mortalities to ensure they are not disposed of in a liquid manure, storm water, or process wastewater storage or treatment system that is not specifically designed to treat animal mortalities; and (2) ensure that chemicals and other contaminants handled on-site are not disposed of in any manure, litter, process wastewater, or storm water storage or treatment system unless specifically designed to treat such chemicals and other contaminants. Additionally, the Department’s solid waste regulations (75-10-212 and 75-10-213, Montana Code Annotated) specify restrictions for animal mortalities that are buried on-site. These restrictions have been included in the proposed DEQ Circular 9.

**Comment #20:** “An aerial photograph and soil map for all fields where manure may be applied is not practical since it could be applied to countless different fields over the term of the permit.” Steven Pilcher, Montana Stockgrowers Association

**Response #20:** Concentrated animal feeding operations include not only the production area, but also the land application areas. The revised federal regulations specify best management practices that must be implemented at all large dairy cow, cattle, swine, poultry, and veal calf CAFOs; these best management practices include setback distances to state waters from the land application sites. The nutrient management plan must document that these best management practices are being implemented. Therefore, it is necessary for CAFOs to provide an aerial photograph or soil map for all fields where manure may be applied. These photos and maps are readily available at local NRCS offices, conservation districts, and the state’s Natural Resources Information System web site ( <http://www.nris.state.mt.us/interactive.html> ).

**Comment #21:** “Rather than asking a producer to describe the BMPs that will be implemented they should merely recommend that BMPs be followed to control runoff from land application areas.” Steven Pilcher, Montana Stockgrowers Association

**Response #21:** Proper Best Management Practices are necessary to ensure compliance with CAFO effluent limitation guidelines. The revised federal regulations specify that all

concentrated animal feeding operations must develop and implement a Nutrient Management Plan that must include best management practices and procedures necessary to implement applicable effluent limitations and standards. Under the revised regulations, the nutrient management plan must, to the extent applicable, identify appropriate site specific conservation practices to be implemented, including as appropriate buffers or equivalent practices, to control runoff of pollutants to state waters; identify protocols for appropriate testing of manure, litter, process wastewater, and soil; and establish protocols to land apply manure, litter or process wastewater in accordance with site specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter, or process wastewater.

**Comment #22:** “DEQ has no jurisdiction over the types of crops that are planned on the land application area.” Steven Pilcher, Montana Stockgrowers Association

**Response #22:** DEQ is not exerting jurisdiction over crop planting. Crop type information allows the Department to evaluate whether a concentrated animal feeding operation can appropriately dispose of generated waste. The DEQ must ensure that all land applied waste generated at a concentrated animal feeding operation is disposed of in a manner that ensures appropriate agricultural utilization of the nutrients in manure, litter, or process wastewater. Since different crop types have different nutrient needs, it is necessary for the producer to indicate the type of crop he/she intends to plant at land application sites.

**Comment #23:** “Why are yield goals necessary and how do they relate to water quality impacts?” Steven Pilcher, Montana Stockgrowers Association

**Response #23:** Yield goals are necessary to calculate appropriate agronomic rates. By applying waste at agronomic rates, phosphorus and nitrogen transport from the field to state waters is minimized.

**Comment #24:** “What constitutes a field-specific assessment of the potential for nutrient transport from the field to surface waters?” Steven Pilcher, Montana Stockgrowers Association

**Response #24:** Under the state’s technical standards for nutrient management (described in Section 6 of the circular), a field-specific assessment of the potential for nutrient transport from the field to surface waters is comprised of two methods: the Phosphorus Index or the results of an Olsen P soil test. These state technical standards for nutrient management are applicable to large dairy cow, cattle, swine, poultry, and veal calf CAFOs.

**Comment #25:** “Pg 17 – Does DEQ intend to require a nutrient budget on the millions of acres of crop land in Montana that receive commercial fertilization?” Steven Pilcher, Montana Stockgrowers Association

**Response #25:** No. The Montana Pollutant Discharge Elimination System regulates point source discharges of pollutants to state waters. Although concentrated animal feeding operations are defined as point sources subject to the MPDES program, agricultural operations are typically considered non-point sources of pollution and

exempt from this permitting program. These proposed regulations apply only to concentrated animal feeding operations. Both case law and the revised federal regulations specify that the land application areas utilized at concentrated animal feeding operations are part of the facility's overall operation, and therefore, subject to water quality act regulations. Nutrient budgets, as specified in Section 6 of the proposed circular, are applicable to large dairy cow, cattle, swine, poultry, and veal calf CAFOs.

**Comment #26:** "How can a producer predict the frequency of application of liquid waste when you can't predict the frequency and amount of precipitation that would fill the retention facility and require land application?" Steven Pilcher, Montana Stockgrowers Association

**Response #26:** The frequency of application should be based on the specified storage period of the waste control structure. Properly designed waste control structures are sized to contain the normal rainfall, evaporation, and runoff that occurs during a specified storage period (maximum time between emptying). Just as a producer considers the chances of precipitation events prior to pesticide applications, they need to consider weather conditions prior to waste applications.

**Comment #27:** "How does the type of equipment used for land application impact water quality?" Steven Pilcher, Montana Stockgrowers Association

**Response #27:** The type of equipment used, calibration procedures and records ensure that the CAFO is applying waste at the calculated agronomic rates. These agronomic rates have been developed to ensure that phosphorus and nitrogen transport from the field to state waters is minimized so that water quality is protected. The revised federal regulations require that land applied wastes be done in a manner that ensures the appropriate agricultural utilization of nutrients in the manure, litter, or process wastewater.

**Comment #28:** "Pg 18 – Best Management Practices are intended to be guidelines and not requirements." Steven Pilcher, Montana Stockgrowers Association

**Response #28:** The revised federal regulations specify that best management practices and procedures must be implemented to ensure all applicable effluent limitations and standards are met. The revised federal regulations include specific Best Management Practices (BMPs) that must be implemented at CAFOs. In order to aid producers, these BMPs have been summarized in the proposed circular DEQ 9. Where choices exist, an operator is free to choose between BMPs that work at their operation.

**Comment #29:** "In many cases, livestock must have access to state waters for drinking purposes. In those cases they should be restricted to a water gap and must walk over a berm that will control direct surface runoff. To state that animals may not be allow [sic] to stand in state waters in Montana is ridiculous." Steven Pilcher, Montana Stockgrowers Association

**Response #29:** The revised federal regulations state that all concentrated animal feeding operations must implement best management practices that prevent direct contact of confined animals with state waters. The intent of the rule is to prevent a large number of

animals being held in a small area creating a condition of waste being discharged to state water, not the use of properly designed water gaps and range cattle crossing creeks. By confining animals on state waters and creating an area void of riparian areas and vegetation, pollutants are discharged into state waters. It is important to note that under 75-5-317 (2)(l)(iii), MCA, livestock and other domesticated animals drinking from or fording streams are considered nonsignificant activities that are not subject to the state's nondegradation policy.

**Comment #30:** "In many cases the runoff control facility may actually be within the fenced area of the pens. There is no statutory authority to require they be outside of the feeding area as long as there is no discharge to state waters." Steven Pilcher, Montana Stockgrowers Association

**Response #30:** This type of runoff control facility is not appropriate to meet permit conditions. The revised federal regulations specify that discharges from existing facilities are only allowed as the result of a rainfall event that causes an overflow of process wastewater from a facility specifically designed, constructed, operated, and maintained to contain all process-generated wastewater plus the runoff from a 25-year, 24-hour rainfall event. The livestock confinement area does not constitute a facility that has been specifically designed and constructed to handle process wastewater, nor can a facility be properly operated and maintained when animals are allowed to enter into the waste containment area. In June of 2002, a Montana CAFO using pens as part of the waste control structure had animals die as a result of suffocating and/or drowning in waste.

**Comment #31:** "Pg 19 – What authority does DEQ have to remove manure piles unless they can be documented they will cause water quality violations? What is the scientific basis for stating that manure may not be stockpiled for more than twelve months?" Steven Pilcher, Montana Stockgrowers Association

**Response #31:** This issue has already been addressed in the Department's previous response to comments. The requirement to remove manure stockpiles within 12 months has been removed from the proposed circular.

**Comment #32:** "It is inappropriate to make a blanket prohibition on wastewater being sprayed on frozen ground. If there is no chance of runoff from that land into state waters there is not basis for such a prohibition. The same applies to dry manure." Steven Pilcher, Montana Stockgrowers Association

**Response #32:** Frozen soil is nearly impermeable and often a precursor to rapid water runoff during spring snowmelt. It is the Department's goal to provide information to producers to prevent a discharge to state waters and maintain consistency with the federal regulations. No agronomic uptake occurs on frozen ground and without uptake the application would not be a nonsignificant activity using 'reasonable land, soil, and water conservation practices', as addressed in 75-5-317(2), MCA.

**Comment #33:** "Pg 20 – Limiting application rates to levels that will not exceed agronomic uptake rates for nutrients cannot be justified as exceeding that rate does not mean a violation of water quality standards will occur." Steven Pilcher, Montana Stockgrowers Association

**Response #33:** The requirement that application rates be limited to levels that do not exceed agronomic rates for nutrients is based on the revised federal regulations and 75-5-317, MCA. Technology based effluent limitations have been promulgated by EPA and are based on the demonstrated performance of a reasonable level of treatment that is within the economic means of specific categories of industrial facilities. These effluent limitations are not based on water quality standards. The revised effluent limitation guidelines require that land applied waste be applied at rates that ensure appropriate agricultural utilization of nutrients in manure, litter, or process wastewater. Monitoring the water quality at every land application site would be very burdensome; by applying waste at agronomic rates, nutrients discharges to ground water and surface water will be minimized so that water quality is protected.

**Comment #34:** “All of the land application requirements could easily be replaced with a simple statement that ‘Wastewater and manure must be disposed of in a manner that will not cause a violation of water quality standards.’” Steven Pilcher, Montana Stockgrowers Association

**Response #34:** This comment has already been addressed in the Department’s previous response to comments.

**Comment #35:** “Pg 25 – Why are the technical standards for nutrient management not included in Section 3, page 16?” Steven Pilcher, Montana Stockgrowers Association

**Response #35:** Under the revised federal regulations, all concentrated animal feeding operations are required to develop and implement a nutrient management plan. However, only large dairy cow, cattle, swine, poultry, and veal calf operations are required to develop a nutrient management plan that is in accordance with the state’s technical standards listed in Section 6 of the proposed circular. Therefore, the Department chose to separate these two sections in order to distinguish between applicable requirements.

**Comment #36:** “Pg 32 – What authority does DEQ have to specify the frequency of visual inspections? This may be a recommendation but it can’t be a requirement.” Steven Pilcher, Montana Stockgrowers Association

**Response #36:** As specified in 40 CFR Part 412, which is adopted by reference in the proposed rules, large dairy cow, cattle, swine, poultry, and veal calf CAFOs must conduct routine visual inspections as part of the applicable effluent limitation guidelines. The proposed circular DEQ 9 simply summarizes these inspection requirements as listed in 40 CFR Part 412 for producers’ benefit.

**Comment #37:** “Pg 33 – The estimated amount of manure produced in open feedlots is irrelevant.” Steven Pilcher, Montana Stockgrowers Association

**Response #37:** As stated above, the land application sites of a concentrated animal feeding operation are considered part of the overall operation and therefore, subject to water quality act regulations. The estimated amount of manure produced is relevant to ensure that adequate land application sites and/or alternative disposal methods are available to meet the applicable effluent limitation guidelines.

**Comment #38:** “What difference does it make if the NMP was prepared by a certified nutrient management planner?” Steven Pilcher, Montana Stockgrowers Association

**Response #38:** The revised federal regulations specify that annual reports for CAFOs must include a statement indicating whether the current version of the CAFO’s nutrient management plan was developed or approved by a certified nutrient management planner. EPA intends to use this information to determine the availability of certified specialists for developing and implementing nutrient management plans.

**Comment #39:** “The technical standard addresses both land application and production area requirements for Large CAFOs. The standards allows for deviations from design criteria for animal waste management systems (Section 1 of standards) with approval from the State. Given the lack of specificity, it is assumed that all of the design criteria included in the standard are eligible for a deviation request. This may be a potential issue as the design criteria in the technical standard include production area design criteria that are consistent with the revised Federal CAFO ELG. With respect to production area requirements, is the deviation intended to address the availability of voluntary alternative performance standards as specified in the federal regulation? If this is the case, the state technical standard should specify that these alternative performance standards, applicable to the production area, must achieve a quantity of pollutants discharged from the production area that is equal to or less than the quantity of pollutants that would be discharged if the baseline ELG requirements are applied to the operation.” EPA Region VIII

**Response #39:** The case-by-case deviation request proposed in DEQ Circular 9 allows producers to deviate from the listed design criteria (setback distances, ground water protection, etc.) based on site-specific factors. Although DEQ Circular 9 summarizes the majority of the applicable effluent limitation guidelines, the Department has also proposed to adopt 40 CFR Part 412 by reference. Deviations from the requirements found in 40 CFR Part 412 are not allowed and cannot be approved by the department. Voluntary alternative performance standards have not been included in the proposed circular. If a producer requests to use this type of effluent limitation guideline, all of the required information listed in 40 CFR Part 412 must be submitted.

**Comment #40:** “Under the section entitled ‘Animal Waste Management System Design – Design Characteristics’ the technical standard addresses Wastewater Treatment Strip, Rapid Infiltration Strip, and Overland Flow Treatment in addition to a Waste Storage Structure and a Waste Treatment Lagoon. Are these treatment systems intended to be applicable to the production area of all Large CAFOs and deemed to meet the requirement of 40 CFR Part 412? What is the technical basis and documentation used by the State to determine that these three treatment systems provide equivalent performance to the ELG. [sic]” EPA Region VIII

**Response #40:** Wastewater treatment strips, which includes rapid infiltration treatment and overland flow treatment, may be used as a component to an overall waste control system. Wastewater treatment strips are not intended to be used solely to meet the requirements of 40 CFR Part 412. Because CAFOs are expected to meet water quality based effluent limitations in their permits, as well as technology based effluent

limitations, it may be necessary for a facility to design a waste control system that includes methods for reducing the nutrient content of their waste. Any proposed design of an animal waste management system that includes wastewater treatment strips must include provisions for operation and management that controls applications of wastewater to the treatment strips and will prevent discharges from occurring outside of precipitation events.

**Comment #41:** “The technical standard states that ‘All permanent manure stockpiles should be removed and land applied as soon as possible. Manure may not be stockpiled for more than 12 months.’ The technical standard does not appear to address runoff from these stockpiles which the federal regulation defines as part of the production area. It is recommended that the state standard specify that stockpiles are part of the production area and that any stockpile that remains for more than 15 days is considered storage and subject to the requirements of 40 CFR Part 412 (clean water must either be diverted from coming into contact with the stockpiled manure or the runoff from [sic] the stockpile must be collected).” EPA Region VIII

**Response #41:** The proposed circular DEQ 9 defines the production area as “part of an animal feeding operation that includes the animal confinement area, the manure storage area, the raw materials storage area, and the waste containment areas.” Section 1 of the proposed circular already states that the production area must be designed, built, operated, and maintained to handle all manure, litter, and process wastewater, including the runoff and direct precipitation from normal rainfall events up to a 25-year, 24-hour rainfall event (or 100-year, 24-hour rainfall event for large swine, poultry, and veal calf CAFOs designed and built after April 14, 2003).

**Comment #42:** “Under the section entitled ‘Calculating Waste Production’ (page 13), the daily manure production table appears to have an error. In the ‘Total Manure (cu ft)’ column for a 750 pound heifer, a value of 1.70 cubic feet is given. Calculation using the given values of 45 pounds of manure weighing 65 pounds per cubic foot results in a value of 0.69 cubic feet.” EPA Region VIII

**Response #42:** This waste production table was taken from Midwest Plan Services’ publication Manure Characteristics, MWPS-18 Section 1, Second Edition. The discrepancy noted above is not an error. The values listed in the total manure column were calculated using total solids divided by the solid content percentage, while the values listed in the density column are based on Midwest Plan Service historical data.